

Exposure Dose Distribution of the Workers at Fukushima Daiichi Nuclear Power Plant

provided by TEPCO
As of 31 January 2014

1 Number of Workers (Later than 11 March 2011)

		Person	Increase	Emergency Workers(*)	Date Update
Total Workers		31,383	475	19,346	31 December 2013
	TEPCO	4,086	19	3,391	
	Contractor	27,297	456	15,955	

*Tentative Number

2 Radiation Exposure Dose Distributions

(1) The distribution of external exposure dose of the workers during the last 3 months

(Numbers of workers who entered each area every month)

Effective Dose (E) mSv	October 2013			November 2013			December 2013		
	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100<E	0	0	0	0	0	0	0	0	0
75<E<=100	0	0	0	0	0	0	0	0	0
50<E<=75	0	0	0	0	0	0	0	0	0
20<E<=50	0	0	0	0	0	0	0	0	0
10<E<=20	0	47	47	0	32	32	0	11	11
5<E<=10	8	343	351	5	303	308	0	158	158
1<E<=5	146	1,556	1,702	119	1,533	1,652	99	1,568	1,667
E<= 1	893	3,459	4,352	955	3,700	4,655	849	3,896	4,745
Total	1,047	5,405	6,452	1,079	5,568	6,647	948	5,633	6,581
Maximum (mSv)	9.50	19.36	19.36	9.20	16.91	16.91	4.98	12.61	12.61
Average (mSv)	0.55	1.43	1.29	0.48	1.28	1.15	0.38	1.03	0.93

* External exposure was measured by PAD. The exposure dose is subject to change due to the replacement of PAD-measured dose to glass badge-measured dose. The number of workers is also subject to change due to the addition of workers who wore only glass badges.

(2) Combined Cumulative Effective Dose from March 2011 (Internal and External)

Effective Dose (E) mSv	March 2011-November 2013			March 2011-December 2013			Difference		
	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
250<E	6	0	6	6	0	6	0	0	0
200<E<=250	1	2	3	1	2	3	0	0	0
150<E<=200	24	2	26	24	2	26	0	0	0
100<E<=150	118	20	138	118	20	138	0	0	0
75<E<=100	255	108	363	255	112	367	0	4	4
50<E<=75	321	826	1,147	323	850	1,173	2	24	26
20<E<=50	608	4,135	4,743	607	4,197	4,804	-1	62	61
10<E<=20	538	3,800	4,338	544	3,875	4,419	6	75	81
5<E<=10	431	3,633	4,064	431	3,687	4,118	0	54	54
1<E<=5	694	6,705	7,399	707	6,835	7,542	13	130	143
E<= 1	1,071	7,610	8,681	1,070	7,717	8,787	-1	107	106
Total	4,067	26,841	30,908	4,086	27,297	31,383	19	456	475
Maximum (mSv)	678.80	238.42	678.80	678.80	238.42	678.80	-	-	-
Average (mSv)	23.62	10.94	12.61	23.60	10.97	12.61	-	-	-

*Number of New comer in December was 475.

*Effective dose has been changed due to the re-evaluation of internal exposure dose in July 2013.

*There has been no significant internal exposure reported since October 2011. A part of internal exposure data is under review, and subject to change.

*External exposure was measured by PAD. The exposure dose is subject to change due to the replacement of PAD-measured dose to glass badge-measured dose. The number of workers is also subject to change due to the addition of workers who wore only glass badges.

(3) Combined Cumulative Effective Dose from April 2013 (Internal and external)

Effective Dose (E) mSv	April 2013-November2013			April 2013-December2013			Difference		
	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100<E	0	0	0	0	0	0	0	0	0
75<E<=100	0	0	0	0	0	0	0	0	0
50<E<=75	0	0	0	0	0	0	0	0	0
20<E<=50	15	321	336	19	377	396	4	56	60
10<E<=20	47	1,147	1,194	54	1,370	1,424	7	223	230
5<E<=10	145	1,509	1,654	157	1,592	1,749	12	83	95
1<E<=5	621	3,102	3,723	643	3,284	3,927	22	182	204
E<= 1	754	4,027	4,781	735	4,104	4,839	-19	77	58
Total	1,582	10,106	11,688	1,608	10,727	12,335	26	621	647
Maximum(mSv)	33.98	39.70	39.70	34.70	39.70	39.70	-	-	-
Average(mSv)	2.43	4.41	4.14	2.61	4.69	4.42	-	-	-

* External exposure was measured by PAD. The exposure dose is subject to change due to the replacement of PAD-measured dose to glass badge-measured dose. The number of workers is also subject to change due to the addition of workers who wore only glass badges.

(4) Combined Cumulative Effective Dose of Emergency Dose Limits Applied Workers*

Effective Dose (E) mSv	October 2013	November 2013	December 2013	March 2011-December 2013
100<E	0	0	0	1
75<E<=100	0	0	0	148
50<E<=75	0	0	0	212
20<E<=50	0	0	0	233
10<E<=20	0	0	0	122
5<E<=10	8	5	0	89
1<E<=5	138	115	89	125
E<= 1	441	505	476	45
Total	587	625	565	975
Maximum (mSv)	9.50	9.20	4.98	102.69
Average (mSv)	0.79	0.66	0.46	37.63

* The workers are under application of Emergency dose limit (100mSv) shown in “Ordinance on Prevention of Ionizing Radiation Hazards, chapter 7.” Specifically, it means the workers who engaged in work to maintain the function of cooling reactors or spent fuel tanks or work to maintain the function to control or prevent the release of a huge amount radioactive material due to trouble or break of the reactor facility, at the area where the radiation dose rate exceed 0.1 mSv/h around reactor facilities, steam turbines and related facilities and surrounding area in the NPP. Until now, all designated workers are TEPCO Employees.

* External exposure was measured by PAD. The exposure dose is subject to change due to the replacement of PAD-measured dose to glass badge-measured dose. The number of workers is also subject to change due to the addition of workers who wore only glass badges.